|  | Application No.   | Applicant(s)                |
|--|---|-----------------------------|
|  | Application No.   | Applicant(s)                |
| Notice of Allowability   | 10/788,588  | OLIAEI, OMID                |
| House of Allowability  | Examiner  | Art Unit                    |
|  | Linh V. Nguyen  | 2819                        |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. |   |                             |
| 1. This communication is responsive to <u>8/9/06</u> .   |   |                             |
| 2. The allowed claim(s) is/are <u>1 – 5, 7, 9, 11, and 13 – 16</u> .   |   |                             |
| 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some* c) None of the:  |   |                             |
| 1. Certified copies of the priority documents have been received.  |   |                             |
| 2. Certified copies of the priority documents have been received in Application No   |   |                             |
| <ol> <li>Copies of the certified copies of the priority documents have been received in this national stage application from the<br/>International Bureau (PCT Rule 17.2(a)).</li> </ol>   |   |                             |
| * Certified copies not received:   |   |                             |
| Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.   |   |                             |
| 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.   |   |                             |
| 5. CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.  |   |                             |
| (a) 🔲 including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached   |   |                             |
| 1) 🗌 hereto or 2) 🔲 to Paper No./Mail Date   |   |                             |
| (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of<br>Paper No./Mail Date  |   |                             |
| Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).  |   |                             |
| 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.  |   |                             |
|  |   |                             |
| Attachment(s) 1. ☑ Notice of References Cited (PTO-892)  | 5  Notice of Informal P   | otant Application           |
| 2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)   | <ol> <li>5. ☐ Notice of Informal P</li> <li>6. ☒ Interview Summary</li> </ol> | • •                         |
|  | Paper No./Mail Dat  | e <u>9/26/06</u> .          |
| 3. Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date  | 7. 🛛 Examiner's Amendn  | •                           |
| <ol> <li>Examiner's Comment Regarding Requirement for Deposit<br/>of Biological Material</li> </ol>  |   | nt of Reasons for Allowance |
|  | 9.  |                             |
|  |   |                             |
|  |   |                             |

### **DETAILED ACTION**

1. This office action is in response to RCE filed on 8/9/06. Claims 1 - 5, 7, 9, 11, and 13 - 19 are remaining in this application

## **EXAMINER'S AMENDMENT**

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. David D. Bahler on 9/26/06.

The application has been amended as follows:

Claim 1, on line 10 of the claim, after "processes" inserts - - coupling the output signal of the second complex sigma-delta with the complex asymmetric input signal at the first complex sigma-delta modulated process - -

Claim 5, on line 10 of the claim, after "signal" inserts - - coupling the output of second complex sigma-delta modulator to the complex asymmetric input signal at the first complex sigma-delta modulator - -

Claim 11, on line 15 of the claim, after "signal" inserts - - coupling the output of second complex sigma modulator to the complex asymmetric input signal at the first complex sigma-delta modulator- -

Claim 16, on line 11 of the claim, after "output" inserts - - coupling the output of the second stage to an input terminal of the first stage - -

Cancel claims 17 – 19.

# Allowable Subject Matter

- 3. Claims 1 5, 7, 9, 11, and 13 16 are allowed.
- 4. The following is an examiner's statement of reasons for allowance:

With respect to claim 1, in addition to other elements in the claim, prior art considered individual or combination does not teach or suggest a method comprising: coupling the output signal of the second complex sigma-delta with the complex asymmetric input signal at the first complex sigma-delta modulated process.

With respect to claim 5, in addition to other elements in the claim, prior art considered individual or combination does not teach or suggest and ADC comprising: couple the output of second complex sigma-delta modulator to the complex asymmetric input signal at the first complex sigma-delta modulator.

With respect to claim 11, in addition to other elements in the claim, prior art considered individual or combination does not teach or suggest a complex modulator comprises: couple the output of second complex sigma modulator to the complex asymmetric input signal at the first complex sigma-delta modulator-.

With respect to claim 16, in addition to other elements in the claim, prior art considered individual or combination does not teach or suggest an RF receiver comprising: couple the output of the second stage to a input terminal of the first stage.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

## **Prior Art**

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

### **Contact Information**

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Linh Van Nguyen whose telephone number is (571) 272-1810. The examiner can normally be reached from 8:30 – 5:00 Monday-Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Rexford Barnie can be reached at (571) 272-7492. The fax phone numbers for the organization where this application or proceeding is assigned are (571-273-8300) for regular communications and (571-273-8300) for After Final communications.

LINH NGUYEN
PRIMARY EXAMINER

9/26/06

Linh Van Nguyen

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